

REMARKS

Claims 1, 4-9, 11-21, and 25-32 are pending, with claims 28-32 being withdrawn. No amendments have been made in the present response.

35 U.S.C. 102 AND 35 U.S.C. 103 REJECTIONS

Claims 1, 4, 5, 7, and 11-13 were rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 6,306,447 to Jensen. According to the examiner, Jensen discloses insoluble vegetable protein such as soy protein and also discloses protein from cereal such as barley proteins, oat proteins, rice proteins, wherein said proteins are isolated from their sources and insoluble. The examiner further contends that Jensen discloses insoluble dietary fibers such as potato fibers.

Applicants respectfully disagree. Jensen does not disclose **insoluble** vegetable protein. The examiner supports the contention that the proteins are insoluble by citing claim 7 of the present application which lists the insoluble protein being selected from protein from soy protein among other sources. However, proteins may be both soluble and insoluble. See page 4, lines 6-15 of the application as filed. ***Jensen does not specify if the soy protein is soluble or insoluble.*** In particular, the protein is Jensen is used as an emulsifier improver, unlike the edible fibers of Jensen which are characterized as ingredients resistant to digestion and absorption in a human.

The examiner maintains that the claim 1 limitation of the insoluble vegetable protein being obtained by thermal coagulation is written in product-by-process format and as such the novelty of the claimed product needs to be established, not that of the recited process steps. See sentence bridging pages 4 and 5 of the office action. However, applicants note: “The structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, especially where the product can only be defined by the process steps by which the product is made, or *where the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product*” (emphasis added). See MPEP 2113, citing *In re Garnero*, 412 F.2d 276, 279, 162 USPQ 221, 223 (CCPA 1979)

Applicants contend the insoluble vegetable proteins produced by thermal coagulation are not structurally the same as the insoluble vegetable proteins produced by other methods. For example, enzymes which are part of the insoluble protein fraction are inactivated due to the process of thermal coagulation. See the sentence bridging pages 6 and 7 of the application as filed. Additionally, anti-nutritional factors, such as trypsin inhibitors, are also rendered non-functional due to protein degradation as the result of thermal coagulation. See *supra*. The process of thermal coagulation also results in insoluble protein with improved microbiological quality. See *supra*. The insoluble protein isolated by thermal coagulation is, therefore, not only structurally different from the protein of Jensen but is also functionally different, for at least the reason that it has reduced enzyme activity.

Accordingly, the process step of thermal coagulation produces a structurally distinct insoluble vegetable protein.

Jensen also does not disclose a batter composition, but rather a composition to be used in the preparation of, *e.g.*, bakery products.

Furthermore, there is no teaching or suggestion in Jensen to modify the emulsifier improved, *e.g.*, vegetable proteins, by thermal coagulation to produce insoluble vegetable proteins. The examiner has not established a *prima facie* case of obviousness since each of the claimed limitations are not taught or suggested.

Applicants respectfully request reconsideration and withdrawal of the anticipation / obviousness rejection in view of Jensen.

Claim 6 was rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen. For the foregoing reasons, applicants maintain that claim 6 is not obvious in view of Jensen. Jensen does not teach or suggest an insoluble vegetable obtained by thermal coagulation. For the foregoing reasons, applicants respectfully request reconsideration and withdrawal of the 35 U.S.C. 103(a) rejection of claim 6 in view of Jensen.

Claims 1, 4-9, 11-21, and 25-27 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,272,553 to Bengtsson, et al. in view of Australian Patent Application No. 54821/90 to Landon. According to the examiner, Bengtsson discloses a batter

composition for coating vegetables comprising insoluble dietary fibers, such as potato fiber. The examiner concedes that Bengtsson does not disclose the incorporation of an insoluble vegetable protein. Accordingly, the examiner relies upon Landon for disclosing a batter composition for coating vegetables containing a filling agent in the form of casein or soya milk proteins or soya protein.

The examiner maintains that it would have been obvious for a person having ordinary skill in the art to combine Bengtsson and Landon to create a batter containing an insoluble dietary fiber and an insoluble vegetable protein.

Applicants respectfully disagree. One of the criteria for establishing a *prima facie* obviousness rejection is that upon combination of the cited documents, all of the claimed limitations must be met. As noted by the Examiner, Bengtsson does not disclose insoluble vegetable protein. Landon also fails to disclose insoluble vegetable protein. As previously argued herein, claim 7 specifies the source of the claimed insoluble vegetable protein. The disclosure of, *e.g.*, a soya protein in Landon is not a disclosure of an insoluble vegetable protein because proteins may be soluble or insoluble.

In addition, nothing in Bengtsson or Landon, alone or in combination, discloses insoluble vegetable protein obtained by thermal coagulation. As discussed above, the process of thermal coagulation imparts distinctive structural characteristics to the resulting insoluble vegetable protein obtained. Insoluble vegetable proteins having these structural characteristics are not

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disclosed in the cited references. Accordingly, the conditions for establishing a *prima facie* obviousness rejection have not been met.

Applicants respectfully request reconsideration and withdrawal of the 35 U.S.C. §103(a) rejection over Bengtsson and Landon.

Applicants respectfully submit that the application is now in proper form for allowance, which action is earnestly solicited. If resolution of any remaining issue is required prior to allowance of the application, it is respectfully requested that the examiner contact applicants' attorney at the telephone number provided below.

Respectfully submitted,

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